WHAT IS CLAIMED IS:

1. A method of treating, preventing or ameliorating a disease responsive to induction of the caspase cascade in an animal, comprising administering to said animal a compound which binds specifically to a Tail Interacting Protein Related Apoptosis Inducing Protein (TIPRAIP), wherein said compound induces activation of the caspase cascade in said animal and said disease is treated, prevented or ameliorated;
with the proviso that said compound is not 3-(4-azidophenyl)-5-(3-chloro-thiophen-2-yl)-[1,2,4]-oxadiazole or a substituted 3-aryl-5-aryl-[1,2,4]-oxadiazole.

2. The method of claim 1, wherein said disease is a hyperproliferative disease.

3. The method of claim 2, wherein said disease is cancer.

4. The method of claim 3, wherein said cancer is Hodgkin's disease, non-Hodgkin's lymphomas, acute and chronic lymphocytic leukemias, multiple myeloma, neuroblastoma, breast carcinomas, ovarian carcinomas, lung carcinomas, Wilms' tumor, cervical carcinomas, testicular carcinomas, soft-tissue sarcomas, chronic lymphocytic leukemia, primary macroglobulinemia, bladder carcinomas, chronic granulocytic leukemia, primary brain carcinomas, malignant melanoma, small-cell lung carcinomas, stomach carcinomas, colon carcinomas, malignant pancreatic insulinoma, malignant carcinoid carcinomas, malignant melanomas, choriocarcinomas, mycosis fungoides, head and neck carcinomas, osteogenic sarcoma, pancreatic carcinomas, acute granulocytic leukemia, hairy cell leukemia, neuroblastoma, rhabdomyosarcoma, Kaposi's sarcoma, genitourinary carcinomas, thyroid carcinomas, esophageal carcinomas, malignant hypercalcemia, cervical hyperplasia, renal cell carcinomas, endometrial carcinomas, polycythemia vera, essential thrombocytosis, adrenal cortex carcinomas, skin cancer, or prostatic carcinomas.

5. The method of claim 1, wherein said disease is an inflammatory disease.

6. The method of claim 1, wherein said compound is identified by determining whether said compound binds specifically to TIPRAIP.

7. The method of claim 1, wherein said TIPRAIP is a tail interacting protein.

8. The method of claim 1, wherein said compound induces apoptosis in the cells of said animal within 24 to 48 hours, thereby treating, preventing or ameliorating said disease.

9. The method of claim 1, wherein the molecular weight of said compound is between 250 to 10,000 Daltons.

10. A method of identifying potentially therapeutic anticancer compounds comprising:

(a) contacting a Tail Interacting Protein Related Apoptosis Inducing Protein (TIPRAIP) with one or more test compounds; and

(b) monitoring whether said one or more test compounds binds to said TIPRAIP;

wherein compounds which bind said TIPRAIP are potentially therapeutic anticancer compounds.

11. The method of claim 10, wherein said TIPRAIP is a tail interacting protein.

12. The method of claim 10, wherein said determining whether said compound binds specifically to TIPRAIP comprises a competitive or noncompetitive homogeneous assay.

13. The method of claim 12, wherein said homogeneous assay is a fluorescence polarization assay or a radioassay.

14. The method of claim 10, wherein said determining whether said compound binds specifically to TIPRAIP comprises a competitive heterogeneous assay.

15. The method of claim 14, wherein said heterogeneous assay is a fluorescence assay or a radioassay.

16. The method of claim 10, wherein said TIPRAIP comprises a detectable label.

17. The method of claim 16, wherein said detectable label is selected from the group consisting of a fluorescent label and a radiolabel.

18. The method of claim 10, wherein the 3-(4-azidophenyl)-5-(3-chloro-thiophen-2-yl)-[1,2,4]-oxadiazole or substituted 3-aryl-5-aryl-[1,2,4]-oxadiazole comprises a detectable label.

19. The method of claim 18, wherein said detectable label is selected from the group consisting of a fluorescent label and a radiolabel.

20. The method of claim 10, wherein said TIPRAIP is present in cells *in vitro*.

21. A method of identifying potentially therapeutic anticancer compounds comprising:

(a) contacting said compound with an antibody to 3-(4-azidophenyl)-5-(3-chloro-thiophen-2-yl)-[1,2,4]-oxadiazole or a substituted 3-aryl-5-aryl-[1,2,4]-oxadiazole; and

(b) determining whether said compound binds to said antibody;

wherein compounds which bind said antibody are potentially therapeutic anticancer compounds.

22. A method of prognosing the efficacy of an anti-cancer TIPRAIP binding composition in a cancer patient comprising:

(a) taking a fluid or tissue sample from an individual manifesting a cancer;

(b) quantifying the total mRNA encoding TIPRAIP;

(c) calculating a ratio comprising the quantity of said mRNA to the average quantity of said mRNA in a fluid or tissue not manifesting said cancer;

wherein a ratio greater than 1 indicates that said anti-cancer TIPRAIP binding composition is efficacious.

23. A method of prognosing the efficacy of an anti-cancer TIPRAIP binding composition in a cancer patient comprising:

(a) taking a fluid or tissue sample from an individual manifesting a cancer;

(b) quantifying the TIPRAIP present in said sample;

(c) calculating a ratio comprising the quantity of said TIPRAIP to the average quantity of said TIPRAIP in a fluid or tissue not manifesting said cancer;

wherein a ratio greater than 1 indicates that said anti-cancer TIPRAIP binding composition is efficacious.

24. A complex, comprising:

i) an TIPRAIP; and

ii) an TIPRAIP binding compound;

with the proviso that said TIPRAIP binding compound is not 3-(4-azidophenyl)-5-(3-chloro-thiophen-2-yl)-[1,2,4]-oxadiazole or a substituted 3-aryl-5-aryl-[1,2,4]-oxadiazole.

25. A detectably labeled 3-(4-azidophenyl)-5-(3-chloro-thiophen-2-yl)-[1,2,4]-oxadiazole or substituted 3-aryl-5-aryl-[1,2,4]-oxadiazole comprising

i) 3-(4-azidophenyl)-5-(3-chloro-thiophen-2-yl)-[1,2,4]-oxadiazole or a substituted 3-aryl-5-aryl-[1,2,4]-oxadiazole;

ii) optionally a linker; and

iii) a label;

wherein said 3-(4-azidophenyl)-5-(3-chloro-thiophen-2-yl)-[1,2,4]-oxadiazole or substituted 3-aryl-5-aryl-[1,2,4]-oxadiazole is covalently linked to said label optionally via said linker.

26. The composition of claim 25, wherein said detectable label is biotin, a fluorescent label, or a radiolabel.

27. A composition comprising

i) 3-(4-azidophenyl)-5-(3-chloro-thiophen-2-yl)-[1,2,4]-oxadiazole or a substituted 3-aryl-5-aryl-[1,2,4]-oxadiazole;

ii) optionally a linker; and

iii) a solid phase;

wherein said 3-(4-azidophenyl)-5-(3-chloro-thiophen-2-yl)-[1,2,4]-oxadiazole or substituted 3-aryl-5-aryl-[1,2,4]-oxadiazole is covalently linked to said solid phase optionally via said linker.

28. The composition of claim 27, wherein said solid phase is agarose or *N*-hydroxysuccinimidylcarboxyl-agarose.

29. A method of treating, preventing or ameliorating a disease responsive to induction of the caspase cascade in an animal, comprising administering to said animal a compound which

i) increases the level of cellular mRNA encoding transforming growth factor beta, cyclin-dependent kinase inhibitor 1A, insulin-like growth factor 2 receptor, or insulin-like growth factor binding protein 3; or

ii) decreases the level of cellular mRNA encoding cyclin D1;

with the proviso that said compound is not 3-(4-azidophenyl)-5-(3-chloro-thiophen-2-yl)-[1,2,4]-oxadiazole or a substituted 3-aryl-5-aryl-[1,2,4]-oxadiazole.

30. A method of identifying potentially therapeutic anticancer compounds comprising:

(a) contacting cells with one or more test compounds; and

(b) monitoring

i) cellular increases in mRNA encoding transforming growth factor beta, cyclin-dependent kinase inhibitor 1A, insulin-like growth factor 2 receptor, or insulin-like growth factor binding protein 3; or

ii) cellular decreases in mRNA encoding cyclin D1;

wherein test compounds that cause said increases or decreases are potentially therapeutic anticancer compounds; with the proviso that said compounds do not include 3-(4-azidophenyl)-5-(3-chloro-thiophen-2-yl)-[1,2,4]-oxadiazole or a substituted 3-aryl-5-aryl-[1,2,4]-oxadiazole.

31. A method of treating, preventing or ameliorating a disease responsive to induction of the caspase cascade in an animal, comprising administering to said animal a compound which interferes with or prevents the binding of TIP-47 to insulin-like growth factor 2 receptor; with the proviso that said compound is not 3-(4-azidophenyl)-5-(3-chloro-thiophen-2-yl)-[1,2,4]-oxadiazole or a substituted 3-aryl-5-aryl-[1,2,4]-oxadiazole.

32. A method of identifying potentially therapeutic anticancer compounds comprising monitoring whether one or more test compounds interfere with or prevent the binding of TIP-47 to insulin-like growth factor 2 receptor; wherein test compounds that interfere or prevent said binding are potentially therapeutic anticancer compounds; with the proviso that said compounds do not include 3-(4-azidophenyl)-5-(3-chloro-thiophen-2-yl)-[1,2,4]-oxadiazole or a substituted 3-aryl-5-aryl-[1,2,4]-oxadiazole.